

May 19, 2004

Hazardous, Toxic and Radioactive Waste
Center of Expertise

Dan Elwood
CT Laboratories
1230 Lange Court
Baraboo, WI 53913

Dear Mr. Elwood:

This correspondence addresses the ongoing validation status of CT Laboratories of Baraboo, WI for the U.S. Army Corps of Engineers (USACE) for chemical analysis in support of the USACE Hazardous, Toxic and Radioactive Waste Program, by the addition of PAHs by Method 8310.

Your laboratory is now validated for the parameters listed below:

| METHOD ⁽¹⁾ | PARAMETERS | MATRIX ⁽²⁾ |
|---|---------------------------|--------------------------|
| 300.0/9056 | Anions ⁽⁶⁾ | Water ⁽³⁾ |
| 300.0/9056 | Anions ⁽⁶⁾ | Solids ⁽⁸⁾ |
| 9012A | Cyanide | Water ⁽³⁾ |
| 9012A | Cyanide | Solid ⁽³⁾ |
| 3535/8330 | Explosives | Water |
| 8330 | Explosives | Solids ⁽³⁾ |
| 3510C/8081A | Organochlorine Pesticides | Water ⁽³⁾ |
| 3545/8081A | Organochlorine Pesticides | Solids ⁽⁸⁾ |
| 3510C/8082 | Polychlorinated Biphenyls | Water ⁽³⁾ |
| 3545/8082 | Polychlorinated Biphenyls | Solids ⁽³⁾ |
| 3510C/8270C | Semivolatile Organics | Water ⁽³⁾ |
| 3545/8270C | Semivolatile Organics | Solids ⁽³⁾ |
| 3510C/8310 | PAHs | Water ⁽³⁾ |
| 3545/8310 | PAHs | Solids ⁽³⁾ |
| 3005A/3010A/3020A/6010B/7000A Series ⁽⁵⁾ | TAL Metals ⁽⁴⁾ | Water ⁽³⁾ |
| 3050B/6010B/7000A Series ⁽⁵⁾ | TAL Metals ⁽⁴⁾ | Solids ^(3, 8) |

| | | |
|----------------|--------------------------|-----------------------|
| 5030B/Mod 8015 | TPH – GRO | Water ⁽³⁾ |
| 5035/Mod 8015 | TPH – GRO ⁽⁷⁾ | Solids ⁽³⁾ |
| 3510C/Mod 8015 | TPH – DRO | Water ⁽³⁾ |
| 3545/Mod 8015 | TPH – DRO | Solids ⁽³⁾ |
| 7196A | Hexavalent Chromium | Water ⁽³⁾ |
| 3060A/7196A | Hexavalent Chromium | Solids ⁽³⁾ |
| 5030B/8260B | Volatile Organics | Water ⁽³⁾ |
| 5035/8260B | Volatile Organics | Solids ⁽³⁾ |

- Remarks:
- 1) Sample preparation methods have been added to reflect program policy change.
 - 2) 'Solids' includes soils, sediments, and solid waste.
 - 3) The laboratory has successfully analyzed a Proficiency Testing (PT) sample for this method/matrix.
 - 4) TAL Metals: Aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium, and zinc.
 - 5) Laboratory is validated for 7000A GF-AA analyses for Sb, As, Pb, Se and Tl in water and Se and Ag in soil; 6010B for TAL metals except mercury; and 7470A and 7471A for mercury in water and soil, respectively.
 - 6) Anions: Chloride, fluoride, sulfate, nitrate, nitrite, ortho-phosphate, and bromide.
 - 7) Approval is for medium level (methanol extraction) method only. Approval is limited for work contracted for Louisville District projects.
 - 8) PT results for 8081A in soil, 7000A GF-AA for Ag and Se in soil, and anions by 9056/300.0 in soil will be submitted for evaluation when they become available.

Based on the successful analysis of the National Environmental Laboratory Accreditation Conference Proficiency Testing samples for the appropriate fields of testing, the results of the laboratory inspection, and your Corrective Action Report, your laboratory will be validated for sample analysis by the methods listed above. The evaluation, which was conducted for your facility, is based substantially on ISO Guide 25 (General Requirements for the Competence of Testing Laboratories) and USACE Engineering Manual (EM) 200-1-3, Appendix I (Shell for Analytical Chemistry Requirements). The period of validation has been previously established and expires on December 22, 2005.

The USACE reserves the right to conduct additional laboratory inspections or to suspend validation status for any or all of the listed parameters if deemed necessary. It should be noted that your laboratory may not subcontract USACE analytical work to any other laboratory location without the approval of this office. This laboratory validation does not guarantee the delivery of any analytical samples from a USACE Contracting Officer Representative.

- 3 -

Any questions or comments can be directed to Thomas Georgian at (402) 697-2567. General questions regarding laboratory validation may be directed to the Laboratory Validation Coordinator at (402) 697-2574.

Sincerely,

Marcia C. Davies, Ph.D.
Director, USACE Hazardous,
Toxic and Radioactive Waste
Center of Expertise